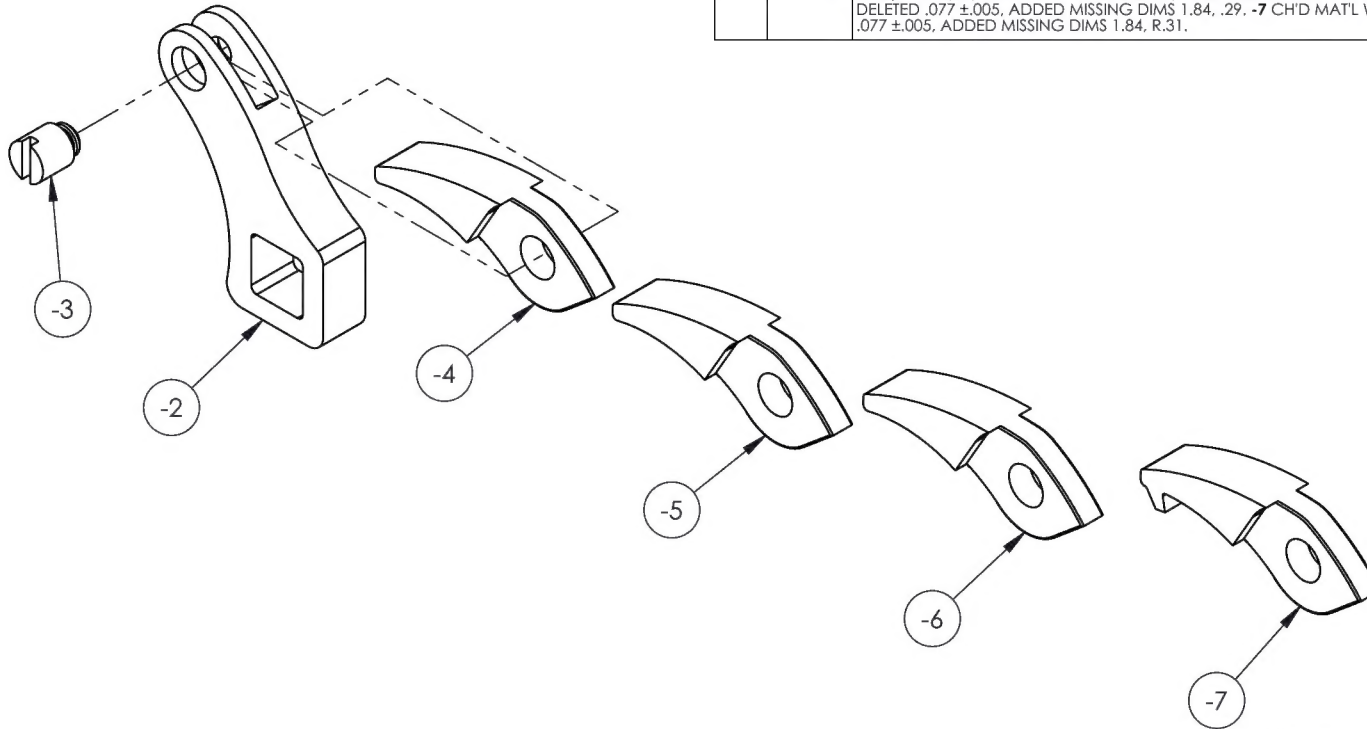


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D TITLEBLOCK AND REVISION BLOCK.	8/3/2009	RJC	RW
B		CH'D T/N FROM AN8514-1, CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW
C		ARM & -2 ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D. ADDED ASSY VIEW AND TABLE SHEET 4.	1/10/2011	RJC	SE
4	16-0046	UPDATED TO NEW STANDARDS. ADDED USED ON MODELS TO ALL DWG SHEETS. DELETED NOTES 1 & 2 SHEET 1. -2 CH'D MAT'L WAS 4140 IS 4140/4142, ADDED MISSING DIM'S 2X R.010 MAX. .14 & .10. .18, CH'D DIMS WAS .384-.379 IS 2X .383-.378, DELETED .024 X 45°. -3 CH'D MAT'L WAS 4140 Q&T IS 4140/4142 Q&T, CH'D DIM WAS .090 IS .09, WAS R.025 IS R.03. -4 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, .29. -7 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, R.31.	3/1/2016	RJC	JAG



UNDER REVIEW
URF 19-967 19.10.24 (VM)

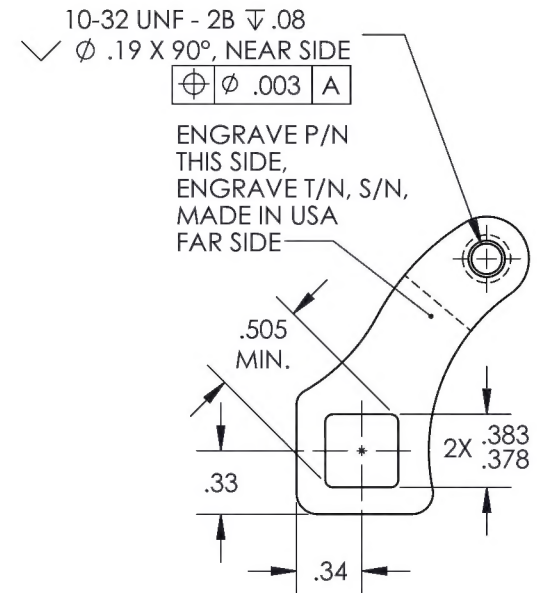
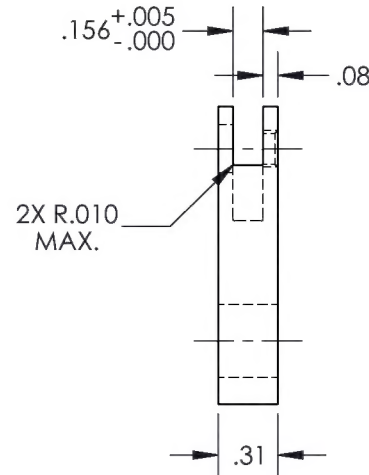
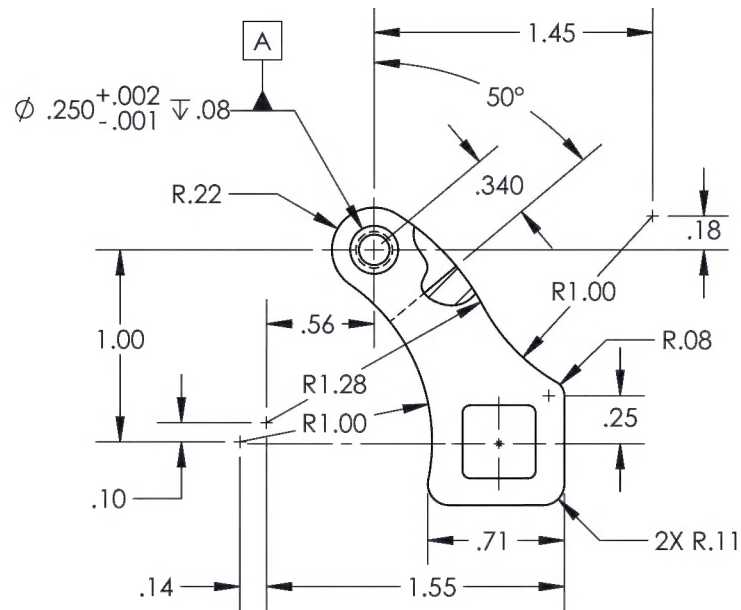
NOTE:
REF. BELL T/N AN8514-1.

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8514-1	REV 4
MAT'L HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	
CHECKED: DUERFELDT	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
USED ON MODEL BELL 212, 230, 407, 412, 430	
SCALE 1:1	DATE 6/26/2000
SHEET 1 OF 5	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-2	1	HANDLE	4140/4142		2
			-3	1	BOLT	4140/4142 Q & T		3
			-4	1	ARM	4140/4142		4
			-5	1	ARM	4140/4142		4
			-6	1	ARM	4140/4142		4
			-7	1	ARM	4140/4142		5

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
B		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW
C		-2 ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D.	1/10/2011	RJC	SE
4	16-0046	-2 CH'D MAT'L WAS 4140 IS 4140/4142. ADDED MISSING DIM'S 2X R.010 MAX. .14 & .10, CH'D DIMS WAS .384-.379 IS 2X .383-.378. DELETED .024 X 45°.	3/1/2016	RJC	JAG



UNDER REVIEW

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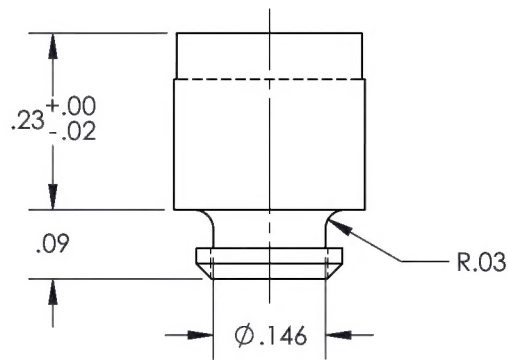
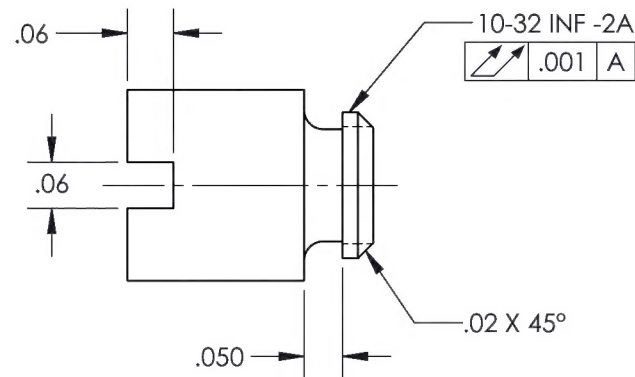
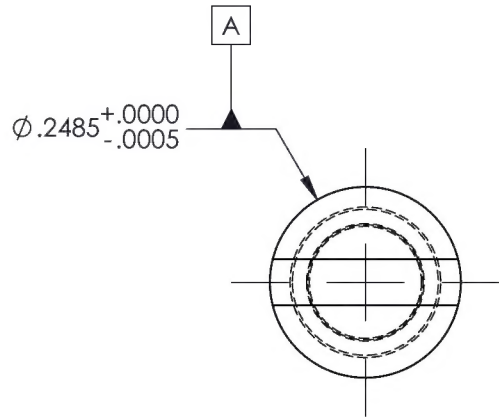
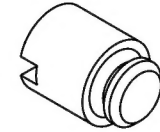
(-2)

HANDLE

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8514-1-2	REV 4
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT RC 22-32	.XXX $\pm .005$ FRACTIONS $\pm 1/8$
FINISH BLACK OXIDE	.XX $\pm .01$ ANGLES $\pm 5^\circ$
SPEC QMSI-6.2.2 REV D	.X $\pm .1$ SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	BELL 212, 230, 407, 412, 430
SCALE 1:1	DATE 6/26/2000
SHEET 2 OF 5	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4	16-0046	-3 CH'D MAT'L WAS 4140 Q&T IS 4140/4142 Q&T, CH'D DIM WAS .090 IS .09, WAS R.025 IS R.03.	3/1/2016	RJC	JAG

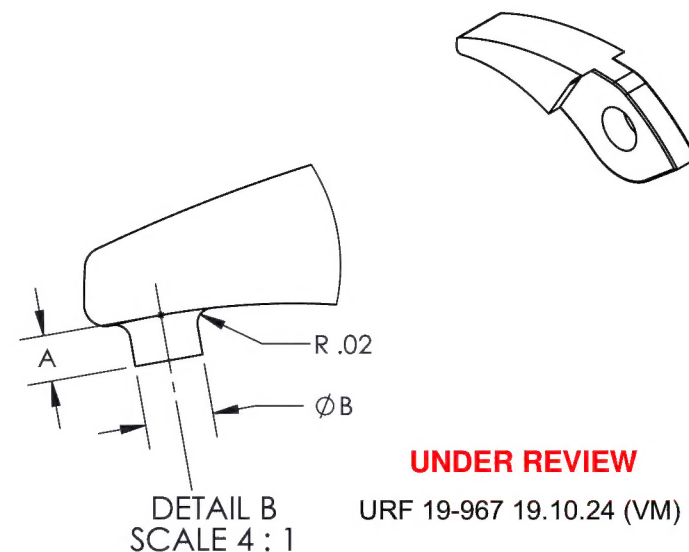


UNDER REVIEW
URF 19-967 19.10.24 (VM)

(-3)
BOLT

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8514-1-3	REV 4
MAT'L 4140/4142 Q & T HEAT TREAT FINISH BLACK OXIDE SPEC QMSI-6.2.2 REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125 ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	BELL 212, 230, 407, 412, 430
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 4:1	DATE 6/26/2000
SHEET 3 OF 5	

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
B		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW
C		ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D. ADDED TABLE.	1/10/2011	RJC	SE
4	16-0046	-4 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, .29.	3/1/2016	RJC	JAG



AN P/N		DIMENSION	
		A \pm .005	\varnothing B \pm .003
RB AN8514-4	.09 PIN ARM	.060	.089
RB AN8514-5	.12 PIN ARM	.120	.121
RB AN8514-6	.19 PIN ARM	.190	.183



TITLE
ADJUSTABLE SPANNER WRENCH

DWG NO.	RB AN8514-1-4
---------	---------------

REV	4
-----	---

MAT'L 4140/4142

HEAT RC 22-32

TREAT	POSSIBLE
FINISH	BLACK OXIDE

SPEC	QMSI-6.2.2 REV D
------	------------------

DRAWN BY:	COL F
-----------	-------

CHECKED:	DUER
----------	------

OPPS APPR:	ANDERSON
------------	----------

QA APPR:	LINDSAY
----------	---------

APPROVED:	LINDSAT
	GILBERT

SCALE	2:1	D
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	UNLESS OTHERWISE SPECIFIED
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DIMENSIONS ARE IN INCHES
XXX ± .005 FRACTIONS ± 1/8

.XXX	± .005	FRACTIONS ± 1/8
.XX	± .01	ANGLES ± .5°
.X	± .1	SURFACES ± .125

1. BREAK ALL SHARP EDGES

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

ASME Y14.5M-2009	
	USED ON MODEL

	USED ON MODEL
	BELL 212, 230, 407, 412, 4

26/2000 SHEET 4 OF 5

④ -4 ⑤ -5 ⑥ -6

ARM

2.1

DATE	
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6/26/2000

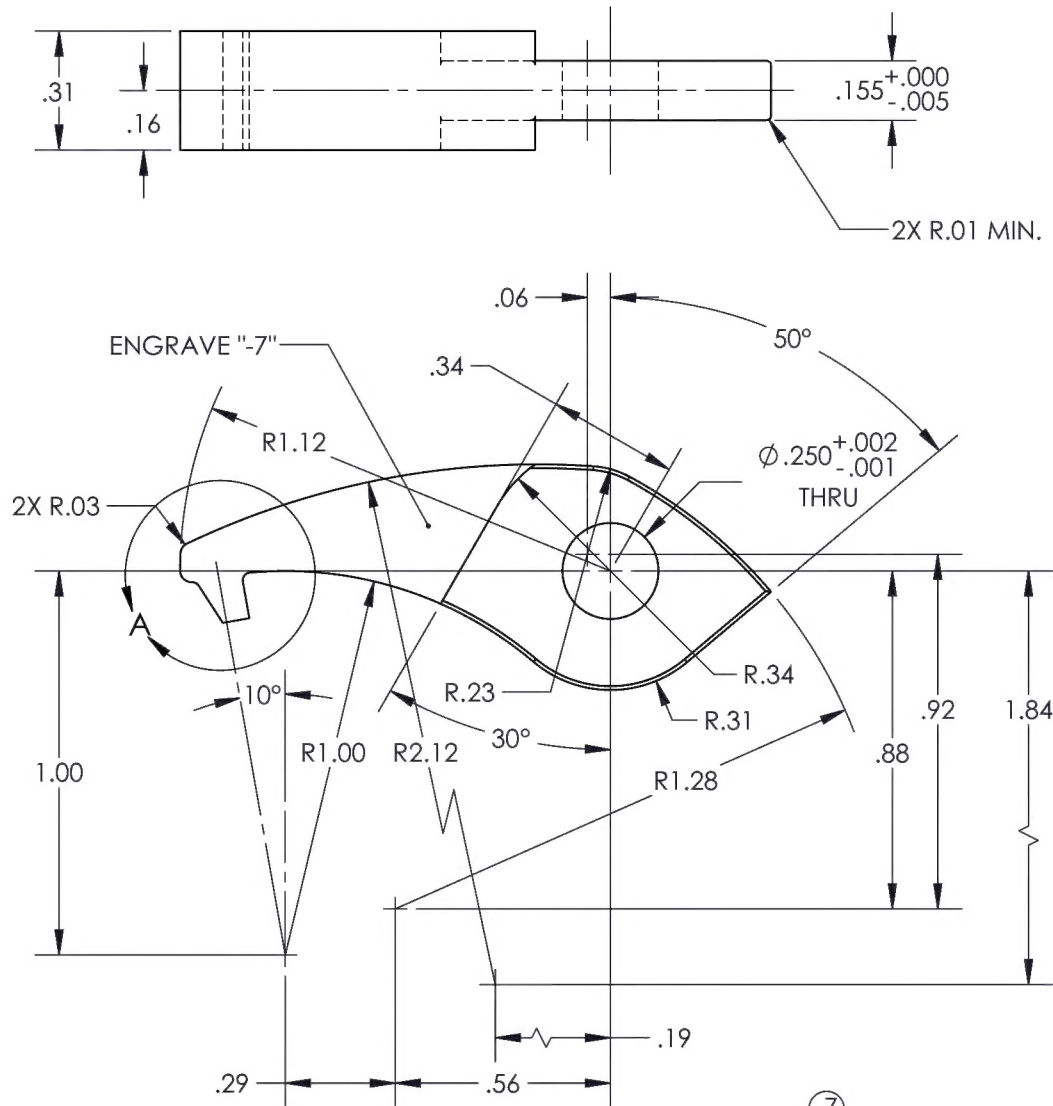
SHEET 4 OF 5

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
B		CH'D ENGRAVE NOTES.	8/3/2009	RJC	RW
C		ADDED MISSING DIMS, CH'D SOME DIM PRECISION TO MATCH INFO REC'D.	1/10/2011	RJC	SE
4	16-0046	-7 CH'D MAT'L WAS 4140 IS 4140/4142, DELETED .077 ±.005, ADDED MISSING DIMS 1.84, R.31.	3/1/2016	RJC	JAG

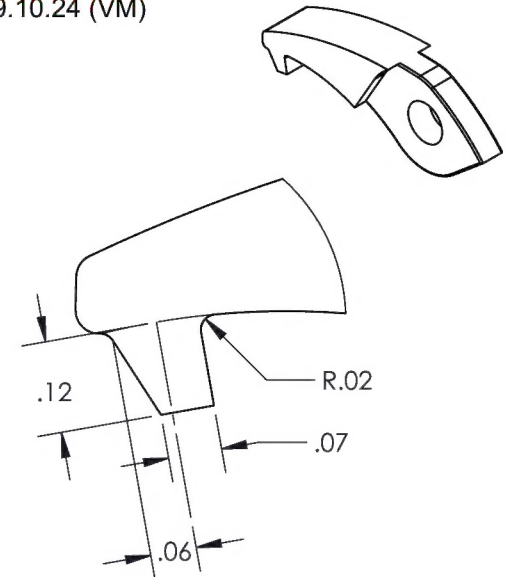
UNDER REVIEW

URF 19-967 19.10.24 (VM)



(-7)

ARM



DETAIL A
SCALE 4 : 1

NOTE:
USE DXF.

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8514-1-7	REV 4
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 22-32	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2 REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125/✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 2:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 6/26/2000	USED ON MODEL
SHEET 5 OF 5	BELL 212, 230, 407, 412, 430